

INTERNATIONAL SEARCH REPORT

PCT/US2005/005562

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F16D41/08 F16D15/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 583 693 A (HENRY MARTIN KESTERTON) 24 December 1946 (1946-12-24) the whole document	1, 15
A	US 6 409 001 B1 (KERR JOHN HUGH) 25 June 2002 (2002-06-25) cited in the application column 7, line 1 - line 23; figures 8a, 8b	1, 7, 8, 15
A	US 2002/142878 A1 (BANSBACH ERIC A ET AL) 3 October 2002 (2002-10-03) paragraph '0030! - paragraph '0035!; figure 4a	1, 4, 12, 13
A	DE 101 58 608 A1 (LANGENBECK, KONRAD) 12 June 2003 (2003-06-12) paragraph '0017! - paragraph '0018!; figure 2	1
-/-		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

S document member of the same patent family

Date of the actual completion of the international search

23 May 2005

Date of mailing of the international search report

31/05/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Van Overbeeke, J

INTERNATIONAL SEARCH REPORT

PCT/US2005/005562

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 3 746 136 A (MAROLA A,US ET AL) 17 July 1973 (1973-07-17) column 1, line 68 - column 2, line 32; figures 1,2,7</p> <p>-----</p>	15

INTERNATIONAL SEARCH REPORT

PCT/US2005/005562

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
GB 583693	A	24-12-1946	NONE		
US 6409001	B1	25-06-2002	AT	244364 T	15-07-2003
			AU	1221099 A	16-06-1999
			BR	9815027 A	03-10-2000
			CA	2315875 A1	10-06-1999
			DE	69816118 D1	07-08-2003
			DE	69816118 T2	08-01-2004
			EP	1038117 A1	27-09-2000
			JP	2001525518 T	11-12-2001
			AT	236361 T	15-04-2003
			AT	206806 T	15-10-2001
			AU	1220999 A	16-06-1999
			AU	1327999 A	16-06-1999
			BR	9815407 A	17-10-2000
			BR	9815408 A	10-10-2000
			CA	2315873 A1	10-06-1999
			CA	2315874 A1	10-06-1999
			WO	9928644 A1	10-06-1999
			WO	9928645 A1	10-06-1999
			WO	9928659 A1	10-06-1999
			DE	69802010 D1	15-11-2001
			DE	69802010 T2	11-07-2002
			DE	69813028 D1	08-05-2003
			DE	69813028 T2	25-09-2003
			EP	1049883 A1	08-11-2000
			EP	1038125 A1	27-09-2000
			JP	2001525517 T	11-12-2001
			JP	2001525523 T	11-12-2001
			US	6367604 B1	09-04-2002
			US	6446776 B1	10-09-2002
US 2002142878	A1	03-10-2002	NONE		
DE 10158608	A1	12-06-2003	NONE		
US 3746136	A	17-07-1973	AU	459295 B2	05-03-1975
			AU	3914672 A	23-08-1973
			CA	950388 A1	02-07-1974
			DE	2212507 A1	16-11-1972
			FR	2135643 A5	22-12-1972
			GB	1371989 A	30-10-1974
			IT	950785 B	20-06-1973
			SE	375834 B	28-04-1975
			US	3820640 A	28-06-1974